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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,641	04/15/2004	Kevin Scott Smith	UNCC 02-020	9020
44231	7590	01/31/2006		
KILPATRICK STOCKTON LLP - 46872			EXAMINER	
J. STEVEN GARDNER			GATES, ERIC ANDREW	
1001 WEST FOURTH STREET				
WINSTON-SALEM, NC 27101			ART UNIT	PAPER NUMBER
			3722	

DATE MAILED: 01/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/825,641	<b>Applicant(s)</b> SMITH ET AL.	
	<b>Examiner</b> Eric A. Gates	<b>Art Unit</b> 3722	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE \_\_\_\_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 November 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 2,6,8,12 and 15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1,3-5,7,9-11,13-14 and 16-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

### **DETAILED ACTION**

1. This office action is in response to Applicant's amendment filed on 17 November 2005.

#### ***Drawings***

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the projection claimed in claims 9 and 22, in combination with the depressions of claims 1 and 17, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

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the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 3-5, 7, 9, 11, 13-14, 16-20, and 22-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Rivin (U.S. Patent 5,322,304).

5. Regarding claim 1, Rivin discloses an apparatus (see Figures 5-7) comprising: a first element 40 adapted to be coupled with a second element 48, the first element 40 comprising a structured surface 64 and the second element comprising a second surface 48, wherein the second surface 48 comprises a receiving surface 48b and wherein the structured surface 64 comprises a plurality of depressions (depressions in 64 for balls 46). See also column 10, lines 4-15.

6. Regarding claim 3, Rivin discloses wherein the receiving surface 48b is substantially uniform.

7. Regarding claim 4, Rivin discloses wherein the structured surface 64 is adapted to be coupled with the receiving surface 48b.

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8. Regarding claim 5, Rivin discloses wherein the structured surface 64 is engaged with the receiving surface 48b.

9. Regarding claim 7, Rivin discloses wherein the depressions (depressions in 64 for balls 46) are substantially hemispherical.

10. Regarding claim 9, Rivin discloses wherein the structured surface 64 further comprises a projection (conical tip).

11. Regarding claim 11, Rivin discloses an apparatus comprising (see Figures 5-7) a first element 40 adapted to be coupled with a second element 48, the first element 40 comprising a first surface 64; and means for damping 64, the damping means disposed on the first surface 64 of the first element 40, wherein the second element 48 comprises a receiving surface 48b and wherein the damping means 64 comprises a plurality of depressions (depressions in 64 for balls 46) disposed in the first surface 64.

12. Regarding claim 13, Rivin discloses wherein the first surface 64 is adapted to be coupled with the receiving surface 48b.

13. Regarding claim 14, Rivin discloses wherein the first surface 64 is disposed adjacent to the receiving surface 48b.

14. Regarding claim 16, Rivin discloses wherein the depressions (depressions in 64 for balls 46) are substantially hemispherical.

15. Regarding claim 17, Rivin discloses a method of damping vibrations in a first element 64 and a second element 48, wherein said method comprises: adapting a first element 64 to be coupled with a second element 48, the first element 64 comprising a structured surface 64 and the second element comprising a second surface 48b, the

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second surface comprising a receiving surface 48b and the structure surface comprising a plurality of depressions (depressions in 64 for balls 46).

16. Regarding claim 18, Rivin discloses wherein the depressions (depressions in 64 for balls 46) are substantially hemispherical.

17. Regarding claim 19, Rivin discloses wherein the first surface 64 is disposed adjacent to the receiving surface 48b.

18. Regarding claim 20, Rivin discloses wherein the first surface 64 is adapted to be coupled with the receiving surface 48b.

19. Regarding claim 22, Rivin discloses wherein the structured surface 64 further comprises a projection (conical tip).

20. Regarding claim 23, Rivin discloses wherein the structured surface 64 is engaged with the receiving surface 48b.

### ***Claim Rejections - 35 USC § 103***

21. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

22. Claims 10 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rivin in view of Slocum et al. (U.S. Patent 6,280,126).

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23. Regarding claims 10 and 21, Rivin discloses the invention substantially as claimed, except Rivin does not disclose wherein a viscous fluid is disposed on the structured surface.

24. Slocum et al. teaches the use of a viscous fluid (see Column 3, lines 63-65) on a structured surface 23 for the purpose of providing additional damping. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to have combined the structured surface of Rivin with the viscous fluid of Slocum et al. in order to provide additional damping to the elements.

### ***Response to Arguments***

25. Applicant's arguments with respect to claims 1 and 11 have been considered but are moot in view of the new ground(s) of rejection.

26. For the reasons as set forth above, the rejections are maintained.

27. Concerning the 35 U.S.C. 112, second paragraph rejection, Applicant states that the description of the structured surface being covered with projections is found on the first 3 lines of page 6 of the disclosure. However, it appears that the reference to projections is actually on page 7.

### ***Conclusion***

28. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric A. Gates whose telephone number is 571-272-5498. The examiner can normally be reached on Monday-Thursday 7:45-6:15.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on 571-272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



EAG  
25 January 2006



BOYER D. ASHLEY  
SUPERVISORY PATENT EXAMINER